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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/718,741      | 11/20/2003  | Christoph Bittner    | CQ10110             | 1790             |

23373 7590 05/18/2006

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| EXAMINER |
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WILLIAMS, DON J

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| ART UNIT | PAPER NUMBER |
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2878

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/718,741

Applicant(s)

BITTNER, CHRISTOPH

Examiner

Don Williams

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11 October 2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

New corrected drawing in compliance with 37 CFR 1.121(d) is required in this application because the reference numbers (13 and 14) have been hand written. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Misawa in view of Suzuki et al (4,527,060).

As to claims 1 and 12, Misawa discloses an imaging apparatus having a record medium support (22) on which record medium (S) is mounted in use, a radiation beam

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generator (10) for generating a radiation beam (L) modulated with imaging data which is directed towards the support (22), a system (polygonal mirror, 16) for causing relative scanning movement between the beam (L) and the support (22), and a detection system (end of sheet sensor, 28) for detecting radiation (L) emitted from the support or record medium (S) in response to incident radiation from the radiation beam generator (10), (see figure 1, column 5, lines 11-67, column 6, lines 25-39, figure 2, column 7, lines 18-55). Misawa fails to explicitly disclose the emitted radiation having a different wavelength from the incident radiation. Suzuki et al disclose a stimuable phosphor sheet that emits light having a wavelength within the range between 300nm and 500nm and a laser source that emits stimulating ray having a wavelength within the range between 600nm and 700nm. It would have been obvious for one ordinary skill in the art to modify Misawa to include a stimuable phosphor which emits light having a wavelength within the range of 300nm to 500nm and a laser source which emits stimulating ray having a wavelength range of 600nm to 700nm to improve the system's ability to detect a change in intensity corresponding to the edge detection of the record medium (S), (see column 5, lines 6-16).

As to claim 2, the modified Misawa and Suzuki et al are related as having image scanning devices. Misawa discloses an imaging system having an edge detection mode and an imaging mode. It would have been obvious for one ordinary skill in the art to include major modes of operation of the laser beam in order to activate the laser beam generator to emit a beam of light with a radiation power output for the purpose of detecting the leading edge of a light sensitive sheet medium, reducing the radiation

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power, and minimizing the risk of causing the fogging on the sheet medium, (see figure 4b, column 9, lines 10-67).

As to claim 3, the modified Misawa discloses the radiation beam generator (10) and switching of major modes. It would have been obvious for one ordinary skill in the art to include switching of the edge detection and imaging modes driven by the radiation beam generator to emit a beam of light carrying information with reduced radiation power output to improve the image data signals for the recording of the first line of images, (see column 3, lines 25-30, figure 4b, column 10, lines 65-68, column 17, lines 15-26).

As to claims 4, 14, the modified Misawa discloses that the record medium is a stimuable phosphor sheet. It is known that when stimuable phosphor is exposed that it fluoresces or emits light, (see Suzkui et al, Abstract, column 1, lines 28-32).

As to claim 5, the modified Misawa discloses an optical system such as the laser beam generator (10), lens (12), mirror (14), polygonal mirror (16), lens (18), and mirror (20) for guiding the imaging radiation (L) to the support (22), the optical system also being adapted to guide the emitted radiation to the detection system (28), (see figure 1, column 12, lines 17-30).

As to claim 6, the modified Misawa discloses an optical system having (see fig. 1) an elongated reflective mirror (20) functionally equivalent to a beam splitter in that it diverts emitted radiation. It would have been obvious for one ordinary skill in the art to use an elongated reflective mirror as a beam splitter in order to divert the emitted radiation to the detection system to improve the edge detection of the record medium.

As to claims 7 and 15, the modified Misawa discloses an external drum scanner (transport drum, 22), (see figure 1, column 6, lines 25-39).

As to claim 8, the modified Misawa discloses a support (22). The modified Misawa fails to disclose that the support is fluorescent. It would have been obvious for one ordinary skill in the art to use a fluorescent or non-fluorescent drum to prevent interference of the detected signal corresponding to the edged detection of the record medium.

As to claims 9, 16, the modified Misawa discloses a drum (22) that comprises of a matted or light absorptive outer peripheral surface that absorbs a major portion of the incident light, (see column 6, lines 30-33).

As to claim 10, the modified Misawa discloses a record medium (S) on a support (22), (see figure 2, column 6, lines 48-52).

As to claim 11, the modified Misawa discloses a radiation (L), a radiation beam generator (10) and a record medium (S) covered with a film which consist of a substrate coated with a silver halide, and a support (22), (see figure 1, column 6, lines 58-65). The modified Misawa fails to explicitly disclose that the record medium has higher fluorescence intensity than the support. Suzuki et al disclose a stimuable phophour sheet. It would have been obvious for one ordinary skill in the art to further modify Misawa to include a stimuable phophour sheet as disclose by Suzuki et al to increase the fluorescene intensity when exposed to radiation.

As to claim 13, the modified Misawa discloses modulating the radiation beam (L) with imaging data when it scans (sweeps or swings) across the record medium (S) from starting end (A1) to terminating end (A2), (see figure 1, column 6, lines 10-25).

As to claim 17, the modified Misawa discloses a record medium (S) and a drum (22) having a matted or otherwise light absorptive outer peripheral surface that absorbs a major portion of the incident light. It would have been obvious for one ordinary skill in the art to use the drum (22) having a light absorptive outer peripheral surface to suppress the incident light on the drum while allowing the record medium (S) to sustain a higher fluorescent.


As to claim 18, the modified Misawa discloses a record medium (S) and a support (22), (see column 6, lines 40-49). The modified Misawa fails to explicitly disclose that the support is more fluorescent than the record medium. It would have been obvious for one ordinary skill in the art to include a more fluorescent support in order to prevent interference with the detected signal corresponding to the record medium.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don Williams whose telephone number is 571-272-8538. The examiner can normally be reached on 8:30a.m. to 5:30a.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800